

How the Gender of U.S. Senators Influence People's Understanding and Engagement in Politics

Citizen's understanding of politics is a fundamental prerequisite for a healthy representative democracy.¹ The effectiveness and durability of electoral accountability relies on the quality of information voters bring with them to the voting booth. The architects of America's democracy were keenly aware that citizens' levels of information and electoral accountability form the cornerstone of a functioning representative democracy. James Madison, writing in 1822, explains, "A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy; or, perhaps both" (Kurland and Lerner 1987).

Well over 200 years after the nascent days of the Republic, the importance of informed citizens is no less central to a representative democracy. Delli Carpini and Keeter (1996: 5) note, "Civic knowledge provides the raw material that allows citizens to use their virtues, skills, and passions in a way that is connected meaningfully to the empirical world." Political knowledge has additional benefits, such as enhancing people's interest in politics and public affairs (e.g. Delli Carpini, Keeter 1996), encouraging people to participate in politics (e.g., Junn 1991), and increasing people's sense of political efficacy (e.g., Verba, Burns and Schlozman 1997). Furthermore, political knowledge is an important mediating factor, enabling people to critically evaluate incoming political information and resist persuasion (e.g., Lodge, McGraw, Stroh 1989; Zaller 1992). In the end, knowledge about legislators and public policies increases citizen's

¹ An online appendix with supplementary material for this article is available at www.cambridge.org/cjo/xxx. The survey data used in this article is available at <http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/30141> and syntax files will be available at <https://pgs.clas.asu.edu/> by May 2014.

likelihood of participation and allows people to more easily evaluate legislative actions of representatives in order to punish or reward politicians at the ballot box.

However, decades of scholarship reveal people do not know much about politics (e.g., Converse 1964; Zaller 1992). As Converse (1990: 372) noted, "the two simplest truths I know about the distribution of political information in modern electorates are that the mean is low and the variance high." The variation in people's understanding of politics is partially driven by individuals' demographic characteristics (e.g., education) and political attitudes, such as their sense of political efficacy, civic duty, and strength of partisanship (e.g., Delli Carpini and Keeter 1996). In addition, scholars have explored how political context and political activities help inform citizens (e.g., Hutchings 2003; Kahn and Kenney 1999). For instance, people are more knowledgeable about their representatives when incumbents are engaged in competitive reelection battles. Similarly, when news coverage of politicians is more plentiful, people are more familiar with political figures (e.g., Arnold 2004). Furthermore, the public is more knowledgeable about representatives who hold prominent leadership positions and who have more seniority within the political institution (e.g., Arnold 2004; Kahn and Kenney 1999).

We believe scholars are only beginning to investigate how the characteristics of representatives contribute to citizens' knowledge of their political leaders. It is important to explore a wide gamut of potential explanations for why people know more about some legislators than others. One of the simplest and most straightforward characteristics of legislators that may prompt differing levels of knowledge among citizens is the gender of representatives. This characteristic has been understudied, due in part to the paucity of women legislators. But, this has changed in the last 25 years, especially in the U.S. Senate. Currently, women in the U.S. Senate represent millions

of constituents. In particular, women senators represent almost half of the U.S. population, with 20 women serving in the U.S. Senate.²

In this paper, we explore whether constituents know more about women senators compared to their male counterparts. Second, we look at whether people's level of information about men and women senators influences their participation in politics. To examine these questions, we rely on the 2006 Congressional Cooperative Election Survey and examine the population of U.S. Senators serving in the 109th Congress. We begin by developing theoretical expectations for why people may know more about women senators.

Why Do We Expect People To Know More About Women Senators?

We offer two rival expectations regarding the relationship between the gender of U.S. Senators and people's understanding of their senators. Our first hypothesis, the *novelty hypothesis*, predicts both men and women in the electorate will know more about women senators compared to men senators. A rival expectation, the *saliency of self hypothesis*, predicts women senators will be better known by only women in the electorate.

We begin with the novelty hypothesis. Women senators stand out in a male-dominated institution. Although women gained the right to vote nearly 100 years ago, men have historically dominated the political landscape in the United States. While the number of women senators has increased almost ten-fold since late the 1980s, male senators continue to outnumber women by a ratio of five to one. Put simply, politics continues to be seen as a "man's game" and people expect top leaders to be men (e.g., Verba, Burns, Schlozman 1997).

In addition, people have stereotypes or prototypes about political leaders and these prototypes lead people to expect their leaders to be men. Like any stereotype, leadership prototypes

² While 78 women currently serve in the U.S House of Representatives, these legislators represent only about 15% of the U.S. population.

help organize, guide, and process incoming information (e.g., Lord and Maher 1991). And, the substance of the leadership prototype corresponds with traits typically associated with men. In particular, the stereotypical man is viewed as possessing agentic traits (e.g., assertive, competent, authoritative) and the stereotypical leader is also viewed as possessing these same traits. In contrast, there is considerable incongruity between the traits associated with a typical woman (e.g., communal traits, like compassion and empathy) and the leadership prototype (for a review, see Eagly and Karau 2002).

Given the overlap between the “male” and “leadership” prototypes, when individuals are confronted with a politician who does not fit the prototype (i.e., a female senator), the politician is more noteworthy. Similarly, a woman senator is more likely to “stand out” because the woman senator looks quite different than the majority of her male colleagues in the chamber. These expectations are supported by research in social psychology explaining salient stimuli stand out “...not because of their own properties per se, but because of the contrast between them and the current context or the perceiver’s temporary or long-term expectancies” (Bargh 1984: 18).

Information that is unexpected or novel cannot be processed automatically. Instead, unexpected information requires a greater degree of attention in order to be processed and understood. Since people are expending more effort when processing these types of stimuli, they are more likely to recall the information (Hastie 1980). Hastie (1980) argues that inconsistent information is better recalled because people create a greater number of associative linkages in memory when they are processing the unusual information. The better memory associated with information violating “expectations” has been found by numerous researchers in the field of psychology (e.g., for a review, see Stangor and McMillan 1992).

Extrapolating to citizens’ knowledge about men and women senators, citizens cannot rely on automatic processing to understand incoming information about women senators. Instead,

people need to rely on conscious processing and engage in more effortful behavior when attempting to interpret news about women senators. This behavior will produce greater recall of processed information about women senators compared to information obtained about less salient male senators. Therefore, all things being equal, we expect the novelty of women senators will lead men and women in the electorate to know more about women senators than their male counterparts.

While the novelty hypothesis predicts women senators will be better known by all citizens, the saliency of self hypothesis predicts women citizens will be affected more powerfully by the novelty of women senators. We know from a voluminous literature in social psychology that one's self-concept can significantly influence all aspects of social information processing (for a review, see Markus and Wurf, 1987). Central conceptions of the self-concept, like gender, are well elaborated and have a strong influence on social perception and memory. Furthermore, one's self-concept is dynamic and shaped by context and place with specific circumstances making certain aspects of the self more salient. As Markus and Wurf (1987:314) explain, "some self-representations are more or less automatically activated as a result of salient situational stimuli." Therefore, we expect the novelty of women senators to prime women citizens with "self-relevant" information (e.g., information related to one's self-concept), thereby powerfully affecting information processing.

In particular, the saliency of self hypothesis predicts women senators will be more salient to women in the electorate (Bargh, 1982). Furthermore, information that is highly self-descriptive (e.g., information about other women) is processed more quickly and with greater emotion (Markus, 1977). And, the strength of "self-referencing effects" promotes more elaborative and detailed processing, enhancing recall and recognition (e.g. Nasby, 1985). Therefore, the saliency of self hypothesis predicts women senators will be particularly relevant to women citizens, producing

a greater impact of the gender of the senator on political knowledge for women compared to men in the electorate.³

In summary, we have presented two rival expectations regarding people's knowledge of men and women senators. *The novelty hypothesis* predicts men and women will hold greater levels of information about women senators compared to men senators. On average, people will know more about women senators than their male counterparts. In contrast, the *saliency of self hypothesis* predicts the novelty of women senators will be especially salient to women constituents, leading only women to know more about women senators than men senators. In other words, the impact of a senator's gender on people's political knowledge of senators will be conditioned by gender of the citizen.

Why We Expect Women to be Mobilized by Women Senators?

The gender of the senator, in addition to influencing people's political knowledge, may influence people's participation in politics. In particular, we expect the mere presence of a woman senator will uniquely mobilize women in the electorate. Women in the U.S. Senate may mobilize women in the electorate for two reasons. First, women in government may signal to women constituents that female public officials will produce more "women-friendly" public policies (Burns, Schlozman, and Verba, 2001; Dolan, 2006; Lawless, 2004). Women senators are much more likely to have lived similar lives, producing similar attitudes toward politics and policy with women citizens. In other words, women and men often have different policy priorities (e.g.,

³ While male senators will be self-referent to men in the electorate, male senators are not novel and will not stand out. After all, there have been 1950 individuals who have served in the U.S. Senate since 1789 and only 44 were women. That is, only two percent of senators have been women across all of U.S. history (http://www.senate.gov/general/Features/ElectingSenators_AHistoricalPerspective.htm).

Schlesinger and Heldman, 2001) and having women in elective office sends a signal to women citizens that their priorities will be represented more forcefully and accurately. Given substantive representation may be enhanced when women represent women (e.g., Banducci, Donovan and Karp, 2004), female senators may entice women to participate in politics.

Second, women in government may produce symbolic benefits, sending messages to women citizens that politics is open and inclusive (Burns, Schlozman, and Verba, 2001; Dolan, 2006; Carroll, 1994; Lawless, 2004; Reingold, 2000). As Burrell (1998: 151) explains, “Women in public office stand as symbols for other women, both enhancing their identification with the system and their ability to have influence within it.” Similarly, Dolan (2006) explains that the presence of women in elective office indicates an openness and legitimacy that is likely to promote electoral engagement among women constituents. Furthermore, drawing on Gilliam’s (1996) model of symbolic politics, we expect women in power may raise group pride, producing “broad psychic benefits” for women in the electorate (Gilliam 1996).

Therefore, we expect women represented by women senators will be more engaged in politics for both substantive and symbolic reasons. Researchers have explored whether women candidates or women legislators enhance women’s participatory attitudes and behavior. Overall, the empirical support linking increases in the number of women politicians with changes in women’s attitudes about politics (e.g., political interest, political efficacy) and changes in women’s political participation (e.g., voting, giving money, persuading others) has been weak. However, some scholars identify more support for political empowerment when citizens are witnessing women candidates locked in competitive campaigns (e.g., Atkeson, 2003; Koch, 1997; Verba, Burns, Schlozman, 1997). The increase in competition undoubtedly draws attention to the gender of the competing candidates. Nevertheless, extensive and thorough analyses across several elections by Sapiro and Conover (1997), Lawless (2004), and Dolan (2006) find modest to no

support for political empowerment among women constituents who are represented by woman legislators and women executives.

We contend that the question of whether women representatives empower women constituents has not been answered definitively. One of the key components of Bobo and Gilliam's (1990) conception of empowerment is that constituents believe that political figures representing a historically disadvantaged group have the power to make important political decisions. The U.S. Senate is one of the most influential and visible legislative institutions in the world and in the last decade the number of women in the U.S. Senate has increased significantly.

We argue that empowerment effects may have been difficult to locate in earlier periods because of the small number of visible women politicians.⁴ As an example, in 1996, a woman living in Illinois was represented by Carol Moseley-Braun in the U.S. Senate. However, it is unlikely that Senator Moseley-Braun, a freshman senator serving with only seven (mostly freshmen) women senators, would be considered an influential policy maker in 1996. Today's U.S. Senate is much different. Twenty women currently serve in the U.S. Senate; many of these women are quite senior (e.g., six women senators have served four terms or longer) and several women chair important committees (e.g., Barbara Mikulski, chair of Appropriations; Patty Murray, chair of Budget; Barbara Boxer, chair of Environment and Public Works).

In the current U.S. Senate, because women senators are more visible and hold important leadership positions, women constituents are likely to feel women senators have the power to make important policy decisions. Therefore, we expect women who are represented by women senators

⁴ All of the studies (with the exception of Dolan, 2006) failing to find evidence for empowerment between women politicians and women citizens examined U.S. political institutions from 1980 to 1998.

will become more engaged in politics. However, women constituents need to be aware women represent them before they can feel empowered. In other words, constituents' knowledge about their senators is a critical antecedent to empowerment. In this study, we rely on a unique dataset with a panel component to determine whether the gender of the senator influences constituents' knowledge of their senator and whether people's knowledge of their senator uniquely mobilizes women constituents who are represented by women in the U.S. Senate.

Data and Design

We utilize the 2006 Cooperative Congressional Election Survey (CCES) to explore citizens' assessments of their U.S. Senators. The CCES was conducted during the 2006 election, with respondents being interviewed in October and then re-interviewed in November after the election. Respondents completed the survey on the Internet, answering a common set of questions as well as a specific module of questions constructed by individual research teams. The 2006 CCES contained a large sample of 36,500 respondents. During the survey, respondents were asked questions assessing their views about politics and political figures as well as their attitudes about variety of political issues.

The CCES relied on a stratified sampling strategy that guaranteed the study achieved adequate samples in all states. A matched sampling methodology was utilized, matching key characteristics of a true representative sample of the U.S. population. According to Vavreck and Rivers (2008), the method of sample matching simultaneously reduces bias, improves efficiency and is a cost-effective method for constructing samples with minimal bias.⁵

The very large sample for this survey provides the opportunity to study legislative constituencies. For instance, in the 2006 CCES, the sample included more than 200 respondents

⁵ The availability of large amounts of auxiliary information from consumer and voter databases make it feasible to select a sample that is approximately balanced on a large set of variables.

from each of the following small states: Nevada, New Mexico and Idaho. In comparison, the 2002 ANES Time Series Study included only a handful of respondents from each of these states, seven respondents from Nevada, two respondents from New Mexico, and six respondents from Idaho. The objective of the ANES survey methodology, unlike the CCES, is to achieve a representative sample of the nation, not necessarily to generate a large number of respondents from each state. Therefore, the sample produces much larger samples from highly populated states and meager samples from low-density states. In addition, because the typical ANES sample is much smaller than the CCES sample, by a ratio of about 30 to 1, it is much more difficult to study variance in state-level attitudes with ANES survey.⁶

In 2006, 14 women were serving in the U.S. Senate. Women senators represented large (e.g., California, New York) and small states (e.g., Alaska, Maine). The women senators varied in seniority from three years in the U.S. Senate (Senator Elizabeth Dole of North Carolina) to almost 20 years (Senator Barbara Mikulski of Maryland). Nine of the women senators were Democrats (64%) and five were Republicans (36%).⁷ We turn now to testing our expectations.

⁶ The ANES Senate Election Study (1988-1992) relied on a stratified sampling strategy by state, allowing investigators to explore people's views of their senators as well as the dynamics of senate elections.

⁷ Several women senators held important party leadership and committee chair positions in the U.S. Senate by 2006. For example, Both Senator Barbara Mikulski and Debbie Stabenow had served (at different times) as Senate Democratic Conference secretary, Barbara Boxer served as Chief Deputy Whip, Elizabeth Dole chaired the National Republican Senatorial Committee, Patty Murray chaired the Democratic Senate Campaign Committee, Olympia Snowe chaired the Small Business and Entrepreneurship Committee, and Susan Collins chaired the Homeland Security and Government Affairs Committee (CAWP, 2007).

Citizens' Ability to Accurately Answer Questions about Senators' Political Profiles

Do people know more about women senators than their male counterparts? We begin by examining rudimentary information (i.e., correctly identifying the senator's party identification, ideology) about the senator before moving to more challenging information (i.e., correctly identifying the senator's positions on roll-call votes). Being able to identify the party, ideology, and voting record of one's representative in the U.S. Senate has important implications for assessing the quality of representative democracy.

To begin, we construct a scale assessing respondents' ability to assess accurately their senators' political profile. Respondents who can accurately place the senator on an ideological scale and can accurately recall the senator's party affiliation are given the highest score, while people who offer dramatically inaccurate assessments of the senator's ideology and who are unable to recall the senator's party affiliation are given the lowest score.⁸ The distribution at the ends of

⁸ To measure the respondent's ability to accurately place the senator on an ideological scale, we compare the respondent's placement of the senator on an ideological scale from 0 to 100 with the senator's ADA score on a 100-point scale. Respondents who place the senator less than 30 points away from the senator's ADA score are scored as accurate, respondents who place the senator between 30 and 70 points of the senator's ADA score are scored as somewhat accurate, and respondents who place the senator more than 70 points away from senator's ADA score are scored as inaccurate. To measure respondents' recall of the senator's party identification, people who correctly recall the senator's party are scored as accurate, while respondents unable to recall their senator's party are scored as inaccurate. In constructing the political profile measure, respondents are placed in one of four categories: (4) people who accurately assess the senator's ideology and the senator's party; (3) people who accurately place the senator's ideology, but inaccurately recall the senator's party or people who offer a somewhat accurate view of the

the scale reveal about one-third of the respondents (i.e., 34%) are able to correctly identify the senator's party identification and ideology, while 13% of the respondents are unable to recall the senator's partisan affiliation and inaccurately place the senator on the ideological scale.⁹

While we are primarily interested in whether the gender of the senator influences what people know about their senators, it is important to identify rival factors that may influence people's level of knowledge. The characteristics of citizens play a key role in understanding people's knowledge about politics. For example, Delli Carpini and Keeter (1996) find people with less education, younger people, and women have lower levels of knowledge about politics. In our analysis, we include the respondent's age, education level, and gender in each of the models.¹⁰

The fact that women know less about politics than men is of particular interest to us (e.g., Burns, Schlozman, Verba 2001; Mondak and Anderson 2004).¹¹ Burns, Schlozman, and Verba (2001) suggest political socialization leads women to view politics as "belonging" to men, leading senator's ideology and can accurately recall the senator's party; (2) people who offer a somewhat accurate view of the senator's ideology and cannot accurately recall the senator's party or people who offer an inaccurate view of the senator's ideology and accurately recall the senator's party; (1) people who offer an inaccurate view of the senator's ideology and party.

⁹ See the Supplemental Appendix A for information on question wording.

¹⁰ We also looked at whether an individual's race or income was related to people's level of information about their senators, but these variables did not have a consistently significant effect on people's understanding of their senators.

¹¹ Research by Mondak and Anderson (2004) suggest that gender differences in political knowledge are partially explained by a gender difference in the "propensity to guess" among survey respondents answering questions. In particular, men are much less likely than women to choose a "don't know" response and are more likely to guess when offering an answer.

to lower levels of political interest and political engagement. Therefore, women are less motivated to seek out information about politics and government (see also Delli Carpini, and Keeter 1996). In certain circumstances, gender differences in political knowledge diminish or disappear. For example, Dolan (2011) compares traditional measures of political knowledge with a “gender-relevant” measure of political knowledge and finds male respondents score higher on the traditional measure of political knowledge, while gender differences disappear or are even reversed for the gender relevant measure of political knowledge.

Beyond citizens’ demographic characteristics, people who are more interested in politics, and who have more knowledge about politics (i.e., political sophistication) are more likely to be more informed about their senators (e.g., Brians and Wattenberg 1996).¹² We also include a measure of strength of partisanship since we expect strong party identifiers to be more aware of their political surroundings, including knowing pertinent facts about their sitting senators (Dolan 2011).¹³

¹² We create an index of political sophistication based on whether respondents correctly identify the party identification of their sitting governor as well as correctly knowing the political ideology of the Democratic and Republican Parties. For the ideology questions, respondents received a “correct” score if they placed the Democratic Party to the left of the middle and they received a “correct” score if they placed the Republican Party to the right of the middle. The political sophistication scale ranges from 0 (no questions answered correctly) to 3 (each of the three questions answered correctly).

¹³ When measuring strength of partisanship, strong Democrats and strong Republicans receive a score of 3, weak Democrats or weak Republicans receive a score of 2, leaning Democrats and leaning Republicans score a 1 and pure Independents receive a score of 0.

Finally, researchers have shown political context affects levels of political information among the electorate. For instance, during elections, when campaigns are more competitive and when the news media is covering the candidates extensively, voters' understanding about politics increases (Kahn and Kenney 1999). In the case of U.S. Senators, people may know more about these representatives when they are up for reelection compared to senators who are two or four years away from their next election. Senators nearing reelection may be engaging in more media-oriented activities and people may be more motivated to seek out information about these senators as Election Day nears. We also include a measure assessing the seniority of the senator since constituents are likely to know more about senior senators compared to senators with a shorter tenure.¹⁴

With rival explanations in place, we examine whether the gender of the senator significantly influences people's ability to answer rudimentary questions about their senator. In each of the analyses in this paper, it is necessary to examine "Senator 1" and "Senator 2" (i.e., the senior and

¹⁴ We examine whether the party of the senator influences citizens' knowledge of senators. First, we simply include a measure of the senator's party in the model. However, the party of the senator does not significantly influence people's understanding of their senator. Second, we include a measure of party proximity where we look at whether people know more about senators of their own party. However, the party proximity measure does not have a consistently positive influence on people's level of knowledge about their senator. Furthermore, including the party of the senator and the party proximity measure does not alter the conditional relationship between the gender of the senator and the gender of the respondent on people's knowledge of their senator. We also look at whether the gender of the other state senator influences people's knowledge of the senator's political profile and roll call votes, but the gender of the other senator fails to reach statistical significance.

junior senator from each state) separately since each respondent is asked to make assessments of both senators serving their state. We present additive and multiplicative models for Senator 1 and Senator 2 in Table 1. The additive model assesses the average impact of the gender of the senator on people's willingness to answer questions about their senator (i.e., the novelty hypothesis). The multiplicative model allows us to test whether the gender of senator is significantly more powerful for women constituents compared to men (i.e., the saliency of self hypothesis). We rely on multilevel modeling (MLM) with maximum likelihood estimation (MLE) because our survey respondents are clustered in the same state. Under these circumstances, OLS assumptions of uncorrelated error terms may be violated (e.g., Steenbergen and Jones 2002).

The results of the additive models are displayed in Table 1. The gender of the senator does not significantly influence people's ability to accurately identify the party and ideology of their senator. People, on average, are no better at recalling the political profile of women senators compared to male senators. These findings indicate that the novelty hypothesis is not supported. Looking at the remaining contextual factors, we find that the seniority of the senator, like the gender of the senator, fails to reach statistical significance in either of the additive models.¹⁵ Finally, the electoral context produces more accurate assessments of a senator's political profile.¹⁶

¹⁵ Senator Hillary Clinton, located in the Senator 2 analysis, was more widely known than the typical senator in 2006 because of her prior position as First Lady. To make sure the inclusion of Hillary Clinton is not inflating the importance of the gender of the senator, we replicate the analysis for Senator 2 and include a binary variable for Hillary Clinton. The binary variable fails to reach statistical significance and does not substantively change the findings in any of the models in Table 1 and Table 2.

¹⁶ In addition, we examined whether people's level of information about their senators varied with (1) the senators' margin of victory in the 2006 election, (2) the senator's proximity to their

However, the impact of the electoral context only achieves statistical significance in the model for Senator 1.

Table 1 About Here

In contrast, the political characteristics of citizens predict powerfully people's willingness to answer questions about their senators. For example, people's level of political interest, their strength of partisanship, and their level of political sophistication are also important predictors in both of the additive models in Table 1. The demographic characteristics of citizens are influential: people who are older and more educated are significantly more willing to answer questions about their senators. Finally, the gender of the respondent is negative and statistically significant in both models, indicating women in the electorate are much less willing to answer questions about their senators compared to men, holding all other factors constant.

Turning to the multiplicative models in Table 1, the interaction coefficient between the gender of the senator and the gender of the respondent is positive and statistically significant in both models. The positive and significant coefficient indicates women constituents respond much more powerfully to the gender of the senator compared to male respondents.¹⁷ In particular, women reelection (two years versus four years) (3) and whether the senator was retiring. These forces never influence people's level of information about their senator; therefore, we do not include these variables in the analysis.

¹⁷ People may be more likely to have information about women senators, compared to men senators, if women senators receive more attention in the news. However, this is not the case. We look at coverage patterns in the largest circulating newspapers for 32 senators serving in 2006 (all women senators and a sample of men senators) and we find that women senators do not receive significantly more press attention than men. In fact, women senators are significantly less likely to be mentioned in newspaper headlines are significantly less likely to be quoted, and

respondents are more likely to recall correctly their senators' ideology and party when answering questions about women senators. This finding provides support for the saliency of self hypothesis.

In order to illustrate how the gender of senators influences people's ability to answer basic questions about their sitting senators, we derive point estimates from the multiplicative models and present these estimates in Figure 1. The data in Figure 1 show men are more likely than women to recall correctly their senators' political and ideological identification. In addition, we see that the gender of the senator significantly decreases the gender gap in men and women constituents' understanding of their sitting senator. Women citizens do better recalling political information about women senators compared to men senators. Therefore, when people are assessing women senators, men and women are almost equally adept at identifying the political profiles of their senators.

Citizens' Ability to Accurately Answer Questions about Senators' Roll Call Votes

We move now to a more challenging set of questions for respondents. We look at people's ability to accurately recall their senator's vote on seven different roll-call measures. We know that roll call votes, or inferring votes from other cues (e.g., legislator's political party or ideology), is challenging for citizens (e.g., Miller and Stokes, 1963). Yet, voting on matters of public policy is a top legislative activity for senators as they represent citizens. The link between senators' policy votes and citizens' awareness of legislative actions is vital for the proper functioning of a representative democracy. While there is considerable variance in people's recollection of their representative's roll call votes (e.g., Ansolabehere and Jones, 2010; Miller and Stokes, 1963), we still do not know whether the variation is partially explained by the gender of the senator.

receive significantly less issue attention than their male counterparts, controlling for a number of rival factors (e.g., election year, circulation size of the newspaper, the seniority and party of the senator).

To assess respondents' knowledge of the senators' voting records, we constructed an index comparing the senator's actual vote with the respondent's impression of how the senator voted on seven ballot measures. Respondents are asked to identify their senators' votes on the following issues: (1) the withdrawal of U.S. military forces from Iraq, (2) late-term abortion, (3) stem cell research, (4) immigration reform, (5) raising the minimum wage, (6) capital gains tax cut, and (7) the free trade agreement with Central America (CAFTA).¹⁸ On average, respondents correctly reported three of the seven roll-call votes for their senator, with one out of five respondents not able to accurately recall any of their senator's votes correctly and only seven percent of the respondents able to correctly answer each of the seven roll-call questions.

In predicting respondents' ability to accurately recall their senator's votes on roll call measures, we utilized multilevel modeling (MLM/MLE) and relied on the same configuration of independent variables introduced earlier. We present the results in Table 2. Beginning with the additive models, the findings are consistent with the earlier analysis. Turning first to the measure of the electoral context, we find people are no more accurate in recalling information about women senators compared to men senators. Once again, we fail to find empirical support for the novelty hypothesis. In addition, the seniority of the senator is inconsequential as well. Finally, the senator's proximity to reelection is positive and statistically significant in the model for Senator 2.

The impact of the political and demographic factors are much more powerful than the electoral context for predicting people's knowledge of their senator's voting record. People who are more interested and more knowledgeable about politics and people more strongly attached to the political parties are much better able to accurately recall their senator's votes on important

¹⁸ Please see Supplemental Appendix A for complete question wording for each of the ballot questions.

legislation. Furthermore, older respondents, more educated respondents, and men are better able to accurately report their senators' roll-call votes.

Table 2 About Here

The results of the multiplicative analysis support our earlier findings. In particular, the gender of the senator is more important for women in the electorate, providing additional evidence for the saliency of self hypothesis. The positive interaction coefficient indicates that the gender of the senator is significantly more influential for women respondents than for men respondents.¹⁹ The data presented in Figure 2, based on the coefficients estimated in the multiplicative models, demonstrate women citizens know less about their senators' roll call votes than men. However, the gender gap in knowledge about senators diminishes when women are evaluating women senators. For instance, when asked about Senator 1, women's average accuracy score is two-thirds of a point lower than men when they are evaluating men senators. In contrast, when evaluating women senators, the gender difference in accuracy drops to less than half of a point.

Collectively, the analyses presented here reveal a consistent story. Women know less about their senators than men. However, and just as consistent, the gender gap in knowledge about sitting senators shrinks significantly when women senators represent women citizens.²⁰ These findings

¹⁹ The gender of the senator may be more powerful when people are asked to recall roll call votes relating to women's perceived strengths (e.g., health-related issues, like stem cell research and partial birth abortions), compared to issues corresponding to men's stereotypical strengths, like trade, taxes, and the Iraq War (e.g., Huddy and Terkildsen, 1993). When we control for the content of the roll call measure, we find no significant differences across different types of issues.

²⁰ We examine whether certain types of women in the electorate are more affected by the gender of the senator when answering questions about the senator. Looking only at women respondents,

hold true controlling for important contextual factors as well as political and demographic measures long known to explain people's knowledge about politics and politicians resonating with the salient self-reference expectations. The key finding that the presence of women senators increases women's knowledge of their senators raises a crucial question: do women senators mobilize women in the electorate? We turn next to exploring the answer to this question.

Citizens' Engagement in Campaign Activity

Researchers have explored whether women in elective office increase the political engagement of women in the electorate with mixed results. Burns, Schlozman and Verba (2001: 1069) description of their own results aptly summarize the state of research today, "A review of these findings about the impact on women's political engagement of increasing female representation among visible political elites yields a *definite maybe*" (italics in original).

We seek to reexamine the empowerment effect with the 2006 CCES data. This dataset has a number of assets over previous data. First, as discussed earlier, more women were serving as U.S. Senators in 2006 with more seniority (e.g., five of the 14 women senators had been in the U.S. Senate for more than two terms) compared to earlier studies of empowerment (e.g., Burns, Schlozman and Verba, 2001). Second, the size and stratification of the CCES sample makes it easier for us to examine state-level effects, compared to prior studies relying on national representative surveys with far fewer respondents (e.g., Sapiro and Conover, 1997). Third, by focusing on sitting senators, instead of candidates, we examine more widely recognizable and successful politicians who may be more likely to empower their constituents. Finally, perhaps most

we examined the conditional relationship between the gender of the senator and several political and demographic variables (i.e., race, interest, ideology), but none of these interactions have a significant and consistent impact on women's ability to accurately answer questions about their senators.

importantly, the CCES is a panel study. Respondents were interviewed in the pre-election wave in October and re-interviewed after the election in November. In examining whether women senators encourage people to become more active, we measure political activity with questions asked after the election in the post-election survey. Therefore, we can assess the impact of information (i.e., measured during the pre-election wave) on people's political engagement (i.e., measured during the post-election wave) in proper time-order.

We construct a political engagement index based on survey questions asked of respondents following the 2006 election in the post-election survey. In particular, we look at whether citizens say they voted in the election, whether they gave money to a political candidate, whether they tried to persuade someone to vote for a particular candidate, and whether they belonged to a political group.²¹

To examine properly the impact of women senators on people's political activity, we control for rival factors correlated with participation, such as political interest, political sophistication, and education (e.g, Verba, Schlozman, and Brady 1995; Wolfinger and Rosenstone 1980). In this analysis, we can distinguish between states with no women senators, states with a single woman senator, and states with two women senators. We also modify the other measures of political context for this analysis. First, instead of simply including a measure of whether one of the senators is facing reelection, we include a measure assessing the competitiveness of the senate election in each state.²² Second, the measure assessing the senators' seniority is the combined number of years the two senators have served in the U.S. Senate.²³

²¹Citizens received one point for each political activity, creating a five-point index (0-4). The five-point index has a mean of 2.1 (with a standard deviation of 1.2).

²² If the difference in the senator and the challenger vote share was less than 15 percent, the state was classified as competitive and received a score of 1, all other states received a score of 0 (i.e.,

Turning to characteristics of respondents, we include measures assessing the amount of information respondents possess about their senators. Critically, we include the dependent variables in Table 1 and Table 2 as independent variables in the models in Table 3.²⁴ We expect people who can accurately assess their senators' ideology and partisanship and correctly identify their senators' positions on key votes will be more likely to participate in politics.

In the first model in Table 3, we examine whether women senators are linked to higher levels of participation across the electorate. The statistically significant coefficient for the gender of senator indicates that as the number of women senators in a state increases, people's political activity increases.

Table 3 About Here

Turning to the remaining independent variables in the additive model, we see people living in states with competitive senate elections are more likely to engage in political activities. We also find people's understanding about politics has a significant and consistent impact on political activity. For example, people who accurately recall senators' political profiles as well as senators' states where senators won reelection more easily and states with no senate election). We also examined whether people were more likely to participate in politics in states with a gubernatorial election or states with competitive gubernatorial elections, but these variables did not achieve statistical significance in the models presented in Table 3.

²³ For example, seniority is 12 for Illinois where Senator Durbin had served 10 years as Illinois Senator and Senator Obama had served 2 years as Illinois Senator in 2006.

²⁴ We combine the accuracy in answers about the political profile of Senator 1 and Senator 2 (i.e. the dependent variables in Table 1) into one measure and we combine the accuracy in answers about roll call votes for Senator 1 and Senator 2 (i.e., the dependent variables in Table 2) into one measure.

positions on important roll call votes are more active in politics.²⁵ Given our previous findings, we can conclude that the gender of the senator is indirectly influencing women's participation by increasing women's level of knowledge about their senators.

In addition, we find the political sophistication of the respondent also influences people's likelihood of engaging in politics. Similarly, interest in politics and strength of partisan attachment powerfully enhance people's participation. Also, consistent with prior literature (e.g., Rosenstone and Hansen, 1993), we find people's involvement in politics increases with their age and education. Finally, similar to previous work (Burns, Schlozman and Verba, 1997), we find women are significantly less likely to participate in politics compared to their male counterparts.

While, on average, the presence of women senators produces a more active citizenry, we are interested in exploring whether the impact of women senators is more consequential for women constituents. In particular, we test for the empowerment effect by examining the conditional relationship between the gender of the senator and the gender of the respondent in the second model in Table 3.²⁶ The findings in the second model demonstrate that the gender of the senator is positive and significant for women respondents, leading to greater levels of political activity for women represented by women senators. Women senators do empower women constituents. However, men are unaffected by the gender of their senator. The insignificant coefficient for women senators in the multiplicative model indicates men in the electorate do not participate more

²⁵ We also examine whether people who are represented by women governors or women representatives in the U.S. House of Representatives are more politically engaged. However, these factors failed to significantly influence engagement.

²⁶ When we replicate the first model in Table 3 for only male respondents, the coefficient for the gender of the senator fails to approach statistical significance (.03, with standard error of .03).

when represented by women senators.²⁷ That is, as the number of women senators increase, men's participation in politics does not increase significantly. Finally, the coefficient for gender of the respondent in the multiplicative model indicates women in the electorate are significantly *less* likely to participate than male respondents when men in the U.S. Senate represent them.

While our analysis is necessarily limited to one year, we can still explore variation across different types of women senators and different types of women constituents to determine the robustness of the empowerment effect in 2006. We expect women senators who are more senior and who receive more news attention in state newspapers, may be more likely to mobilize women citizens because women in the electorate are more likely to recognize them and understand they may have power within the institution. In the third and fourth models in Table 3, we look exclusively at women respondents and estimate whether the impact of women senators is conditioned by the seniority of the senator (Model 3) and the amount of news coverage devoted to these senators in their home states (Model 4).²⁸ The results demonstrate that as seniority increases, the impact of women senators on women's mobilization increases significantly. Similarly, as press attention devoted to women senators' increases, women respondents are more likely to become engaged in politics.

Finally, we look at whether certain women in the electorate are more likely to be become politically active because of the presence of women senators. In particular, are women who are more engaged in politics more likely to be mobilized by women senators? The final model in Table

²⁷ See Bambor, Golder and Milton (2012) for information about interpreting coefficients in multiplicative models.

²⁸ We measure amount of news coverage by relying on Access World News to search for all news articles mentioning the senator in the largest circulating newspaper in the senator's state between January 1 and November 8, 2006.

3 includes an interaction term estimating the conditional impact of strength of partisanship on women's engagement in politics. The significant and positive interaction coefficient indicates that the impact of women senators on women's political activism increases for people who are more attached to the political parties.²⁹ These results suggest women who are more receptive to political messages are more affected by the gender of their senator.

Conclusion and Implications

The face of the U.S. Senate has changed dramatically across the last 25 years, with 20 women senators currently representing over 110 million constituents in 17 states. Women senators come from all regions of the country, representing large and small states, and hail from both political parties. Women currently chair five of the 16 standing committees in the U.S. Senate and three of the four "special or select" committees.

To be sure, there is a substantial literature demonstrating that women legislators act differently than their male counterparts. Men and women legislators have different policy agendas; they vote differently on roll-call votes; they differ in their ideological orientations; and they behave differently in committee settings (e.g., for a review, see Reingold, 2008). These differences are consistent over time and they appear to be stable as new women senators enter the institution.

What is less clear, however, is whether the increasing numbers of women entering the U.S. Senate have altered the attitudes and actions of their constituents. Prior research has failed to consistently document that women senators engage and mobilize citizens. In this paper, we have offered strong theoretical reasons to expect women constituents to pay more attention to public affairs and to become more engaged in politics when represented by women senators. Furthermore, we have

²⁹ The political sophistication and the partisan affiliation (e.g., Democrat, Republican) of the respondent does not significantly condition the impact of women senators on women's political activity.

validated these expectations with data gathered in 2006. Three important findings emerge. First, even at the start of the twenty-first century, women know far less about their senators than men. Second, the gap in political knowledge closes sharply when women senators represent women citizens. Third, and perhaps most importantly, women citizens are more active in politics when represented by women senators.

We are the first scholars to systematically find these patterns across a series of dependent variables and in the face of stiff controls. The coefficients estimating the impact of women senators on levels of political information and political activity for women citizens are very stable and consistently reach statistical significance. The findings of this study have important implications as the number of women in the U.S. Senate climbs to historic levels. The changing profile of the U.S. Senate may influence women across the country, beyond women who are directly represented by women senators, to engage more fully in civic life. The confluence of more women senators and additional women voters may produce important changes in the policy outcomes of the U.S. Congress. For example, we should expect alterations in the legislative agenda with a stronger focus on “compassion issues” such as education, health care, and social programs, since women senators and women in the electorate prioritize these issues. These policies will reinforce the classic circle of representation, potentially encouraging more women citizens to become mobilized, leading to further changes in the political and policy outputs of the U.S. Senate.

References

- Ansolabehere, Stephen and Philip Edward Jones. 2010. "Constituents' Responses to Congressional Roll-Call Voting." *American Journal of Political Science*, 54 (3): 583-597.
- Arnold, Douglas R. 2004. *Congress, the Press, and Political Accountability*. Princeton, NJ: Princeton Press.
- Atkeson, Lonna R. 2003. "Not All Cues are Created Equal: The Conditional Impact of Female Candidates on Political Engagement." *Journal of Politics* 65(4):1040-1061.
- Banducci, Susan A., Todd Donovan, and Jeffrey A. Karp. 2004. "Minority representation, empowerment, and participation." *Journal of Politics* 66(2): 534-556.
- Bargh, John A. 1984. "Automatic and Conscious Processing of Social Information." In *Handbook of Social Cognition*, eds. Robert S. Wyer, Jr. and Thomas K. Srull. Hillsdale, NJ: Erlbaum.
- Bobo, Lawrence and Franklin Gilliam. 1990. "Race, Sociopolitical Participation, and Black Empowerment." *American Political Science Review*. 84:377-93.
- Brambor, Thomas, William Roberts Clark, & Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14: 63-82.
- Brians, Craig L., and Martin P. Wattenberg. 1996. "Campaign Issue Knowledge and Salience: Comparing Reception from TV Commercials, TV News, and Newspapers." *American Journal of Political Science* 40(1):172-193.
- Burns, Nancy, Kay L. Schlozman, and Sidney Verba. 1997. The public consequences of private inequality: family life and citizen participation. *American Political Science Review*, 91, 373–389.
- Burns, Nancy, Kay L. Schlozman, and Sidney Verba. 2001. *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Cambridge: Harvard

University Press.

Burrell, Barbara. 1998. *A Woman's Place is in the House: Campaigning for Congress in the Feminist Era*. Ann Arbor: University of Michigan Press.

CAWP: 2007. "Women in Congress: Leadership Roles and Committee Chairs" Fact Sheet from the Center for American Women and Politics. New Brunswick, NJ: CAWP. Available at: <http://www.cawp.rutgers.edu/> (accessed February 3, 2014).

Carroll, Susan J. 1994. *Women as candidates in American politics*. Indiana University Press.

Converse, Philip. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, eds. David Apter. New York: Free Press.

Converse, Philip E. 1990. "Popular Representation and the Distribution of Information." In *Information and Democratic Processes*, ed. John A. Ferejohn and James H. Kuklinski. Urbana: University of Illinois Press, 369-388.

Delli Carpini, Michael X. and Scott Keeter S. 1996. *What Americans Know About Politics and Why It Matters*. New Haven, CT: Yale University Press.

Dolan, Kathleen, 2006. "Symbolic mobilization? The impact of candidate sex in American elections." *American Politics Research*. 34 (6): 687-704.

Dolan, Kathleen. 2011. "Do Women and Men Know Different Things? Measuring Gender Differences in Political Knowledge." *Journal of Politics* 73(1):97-107.

Eagly, Alice H., and Steven J. Karau. 2002. "Role Congruity Theory of Prejudice Toward Female Leaders." *Psychological Review* 109(3):573-598.

Gilliam Jr., Frank D. 1996. Exploring minority empowerment: Symbolic politics, governing coalitions and traces of political style in Los Angeles. *American Journal of Political Science*, 40(1): 56-81.

Hastie, Reid. 1980. "Schematic principles in human memory." In *Social cognition: The*

- Ontario Symposium*, eds. Edward T. Higgins, C. Peter Herman, and Mark P. Zanna. Hillsdale, NJ: Erlbaum.'
- Hox, J. J. (2010). *Multilevel analysis: Techniques and applications*. 2nd ed. New York:Routledge.
- Huddy, Leonie, and Nayda Terkildsen. 1993. "Gender stereotypes and the perception of male and female candidates." *American Journal of Political Science* 37(1): 119-147.
- Hutchings, Vincent L. 2003. *Public Opinion and Democratic Accountability*. Princeton: Princeton University Press.
- Junn, Jane. 1991. "Participation and Political Knowledge." In *Political Participation and American Democracy*, eds. William Crotty. New York: Greenwood Press.
- Kahn, Kim F. and Patrick J. Kenney. 1999. *The Spectacle of U.S. Senate Campaigns*. Princeton, NJ: Princeton University Press.
- Koch, Jeffrey. 1997. Candidate gender and women's psychological engagement in politics. *American Politics Research*, 25(1), 118-133.
- Kurland, Philip B. and Ralph Lerner, eds. 1987. *The Founders' Constitution*. Chicago: University of Chicago Press, Chapter 18, Document 35.
<http://press-pubs.uchicago.edu/founders/> (accessed August 9, 2012).
- Lawless, Jennifer L. 2004. "Politics of presence? Congresswomen and symbolic representation." *Political Research Quarterly*, 57(1): 81-99.
- Lodge, Milton, Kathleen M. McGraw, and Patrick Stroh. 1989. "An Impression-Driven Model of Candidate Evaluation." *American Political Science Review* 83(2):399-419.
- Lord, Robert G.,and Karen Maher. 1991. *Leadership and Information Processing*. New York: Routledge.
- Miller, Warren E. and Donald E. Stokes. 1963. "Constituency influence in Congress." *The American Political Science Review* 57 (1):45-56.

- Mondak, Jeffery J. and Mary R. Anderson. 2004. "The Knowledge Gap: A Reexamination of Gender-Based Differences in Political Knowledge." *Journal of Politics* 66(2):4 92-512.
- Reingold, Beth. 2000. *Representing women: Sex, gender, and legislative behavior in Arizona and California*. University of North Carolina Press
- Reingold, Beth. 2008. "Women as Office Holders: Linking Descriptive and Substantive Representation." In *Political Women and American Democracy*, eds. Christina Wolbrecht, Karen Beckwith, Lisa Baldez. New York: University of Cambridge Press. 762-775.
- Rosenstone, Steven J. and John Mark Hansen. 1993. *Mobilization, Participation and Democracy in America*. New York: Macmillan
- Sapiro, Virginia, and Pamela Johnston Conover. 1997. "The variable gender basis of electoral politics: gender and context in the 1992 US election." *British Journal of Political Science* 27 (4): 497-523.
- Schlesinger, Mark & Caroline Heldman, 2001. Gender gap or gender gaps? New perspectives on support for government action and policies. *Journal of Politics*, 63(1), 59-92.
- Stangor, Charles and David McMillan. 1992. "Memory for expectancy-congruent and expectancy-incongruent information: a review of the social and social developmental literatures." *Psychological Bulletin*. 111:42-61
- Steenbergen Marco R., and Bradford S. Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46(1):218-37.
- Vavreck, Lynn, and Douglas Rivers. 2008. "The 2006 cooperative congressional election study." *Journal of Elections, Public Opinion and Parties* 18(4): 355-366.
- Verba, Sidney, Nancy Burns, and Kay Lehman Schlozman. 1997. "Knowing and Caring about Politics: Gender and Political Engagement." *Journal of Politics* 59(4):1051-

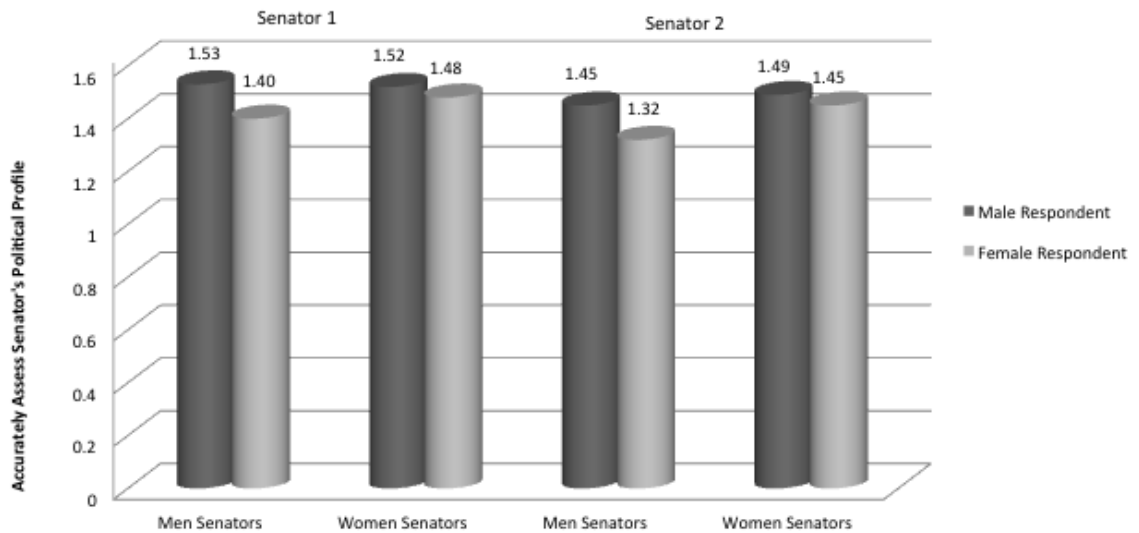
1072.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.

Wolfinger, Raymond, and Rosenstone, Steven J. 1980. *Who Votes?* New Haven: Yale University Press.

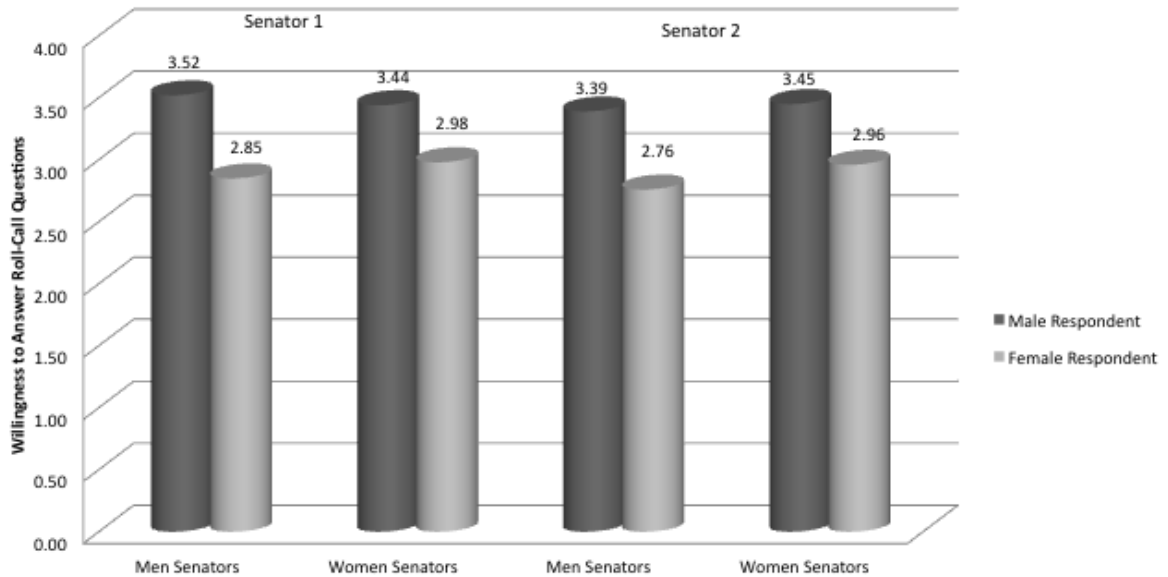
Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

Figure 1. The Interaction Effect of Senator's Gender and Respondent's Gender on Ability to Accurately Assess Senator's Political Profile



Note: These estimates are based on the coefficients presented in Table 1. The point estimates are derived by varying the gender of the respondent and the gender of the senator while holding all remaining variables at their means (Hox 2010).

Figure 2. The Interaction Effect of Senator's Gender and Respondent's Gender on Knowledge of Senators' Roll-Call Votes



Note: These estimates are based on the coefficients presented in Table 2. The point estimates are derived by varying the gender of the respondent and the gender of the senator while holding all remaining variables at their means (Hox 2010).

Table 1. MLM/MLE Predicting Respondents' Ability to Accurately Assess the Senator's Political Profile¹

	Senator 1		Senator 2	
	Additive	Multiplicative	Additive	Multiplicative
<i>Fixed Effects</i>				
Interaction				
Senator Gender *Respondent Gender		.09 (.02)***		.08 (.02)***
Political Context				
Gender of Senator	.04 (.06)	-.01 (.06)	.09 (.07)	.05 (.07)
Election Year	.11 (.05)**	.11 (.05)**	.07 (.06)	.07 (.06)***
Seniority	.002 (.002)	.002 (.002)	-.001 (.004)	-.001 (.004)
Political Characteristics				
Political Interest	.28 (.01)***	.28 (.01)***	.27 (.01)***	.27 (.01)***
Political Sophistication	.31 (.01)***	.31 (.01)***	.33 (.01)***	.33 (.005)***
Strength of Party Identification	.03 (.01)***	.03 (.01)***	.03 (.01)***	.03 (.004)***
Demographic Characteristics				
Education	.03 (.003)***	.03 (.003)***	.04 (.003)***	.04 (.003)***
Age	.006 (.0003)***	.006 (.0003)***	.005 (.0003)***	.005 (.0003)***
Gender of Respondent	-.11 (.01)***	-.13 (.01)***	-.10 (.01)***	-.12 (.02)***
Intercept	-.55 (.05)***	-.54 (.05)***	-.50 (.05)***	-.49 (.05)***
<i>Variance Components</i>				
State-Level	.02 (.004)***	.02 (.004)***	.03 (.008)***	.03 (.007)***
Individual-Level	.34 (.003)***	.34 (.003)***	.35 (.003)***	.35 (.003)***
-2 x Log Likelihood	45113.554	45082.303	45700.530	45676.86
N(respondents)/N(states)	25330 /50	25330 /50	25330 /50	25330 /50

¹ Unstandardized coefficients, with standard errors in parentheses.

Note: The dependent variable is people's ability to accurately assess the senator's ideology and party identification (see text for more information). Gender of the Senator is coded 1 for female senators, 0 for male senators. Election Year is coded 1 for senators up for reelection in 2006, 0 for other senators. Seniority is the number of years the senator has served in the U.S. Senate. Political interest ranges from "not at all" interested (1) to "very interested" (3). Political sophistication ranges from 0 to 3. Strength of party ranges from Independent (0) to strong Republican or Democrat (3). Education is coded on a six-point scale ranging from no high school to graduate school. Age is coded in years. Gender of respondent is coded 1 for female and 0 for male.

*** p<.01

** p<.05

* p<.10

Table 2. MLM/MLE Predicting Accuracy of Respondents' Knowledge of Senators' Roll-call Votes¹

	Senator 1		Senator 2	
	Additive	Multiplicative	Additive	Multiplicative
<i>Fixed Effects</i>				
Interaction				
Senator Gender *Respondent Gender		.22 (.05)***		.14 (.05)***
Political Context				
Gender of Senator	.04 (.20)	-.08 (.16)	.14 (.21)	.06 (.21)
Election Year	-.08 (.16)	-.08 (.16)	.42 (.16)**	.42 (.16)***
Seniority	.01 (.006)	.01 (.004)	.01 (.01)	.01 (.01)
Political Characteristics				
Political Interest	1.02 (.02)***	1.02 (.02)***	1.06 (.02)***	1.06 (.02)***
Political Sophistication	.47 (.01)***	.47 (.01)***	.47 (.01)***	.47 (.01)***
Strength of Party Identification	.08 (.01)***	.08 (.01)***	.08 (.01)***	.08 (.01)***
Demographic Characteristics				
Education	.13 (.01)***	.13 (.01)***	.15 (.009)***	.15 (.009)***
Age	.01 (.001)***	.01 (.001)***	.01 (.001)***	.01 (.001)***
Gender of Respondent	-.62 (.02)***	-.67 (.03)***	-.59 (.02)***	-.63 (.03)***
Intercept	-1.38 (.16)***	-1.34 (.16)***	-1.63 (.15)***	-1.60 (.15)***
<i>Variance Components</i>				
State-Level	.21 (.04)***	.21 (.04)***	.26 (.05)***	.26 (.03)***
Individual-Level	3.45 (.03)***	3.44 (.03)***	3.57 (.05)***	3.57 (.03)***
-2 x Log Likelihood	103389.61	103373.43	104284.86	104278.054
N(respondents)/N(states)	25330/50	25330/50	25330/50	25330/50

¹ Unstandardized coefficients, with standard errors in parentheses.

Note: The dependent variable is the number of roll-call votes citizens' correctly answer about the senator across seven different roll-call votes. Gender of the Senator is coded 1 for female senators, 0 for male senators. Election Year is coded 1 for senators up for reelection in 2006, 0 for other senators. Seniority is the number of years the senator has served in the U.S. Senate. Political interest ranges from "not at all" interested (1) to "very interested (3). Political sophistication ranges from 0 to 3. Strength of party ranges from Independent (0) to strong Republican or Democrat (3). Education is coded on a six-point scale ranging from no high school to graduate school. Age is coded in years. Gender of respondent is coded 1 for female and 0 for male.

*** p<.01

** p<.05

* p<.10

Table 3. MLM/MLE Predicting Respondents' Level of Political Activity: Multiplicative Models Examining the Conditional Impact of Women Senators¹

	<i>Full Sample</i>		<i>Women Respondents</i>		
<i>Fixed Effects</i>					
Political Context					
Gender of Senator	.05 (.03)*	.02 (.03)	-.002 (.09)	-.01 (.07)	.004 (.04)
Competitiveness of Senate Election	.08 (.04)**	.08 (.04)**	.06 (.05)	.06 (.05)	.06 (.05)
Combined Seniority of Senators	.001 (.001)	.001 (.001)	-.0007(.001)	-.007(.001)	-.0006(.001)
Political Characteristics					
Knowledge of Senators' Pol. Profile	.09 (.01)***	.98 (.01)***	.11 (.01)***	.11 (.01)***	.11 (.01)***
Knowledge of Senators' Roll Call	.04 (.002)***	.04 (.002)***	.04 (.003)***	.04 (.003)***	.04 (.003)***
Political Interest	.43 (.01)***	.43 (.01)***	.40 (.02)***	.40 (.02)***	.40 (.02)***
Political Sophistication	.08 (.01)***	.08 (.01)***	.08 (.01)***	.08 (.01)***	.08 (.01)***
Strength of Party Identification	.07 (.006)***	.07 (.006)***	.07 (.008)***	.07 (.009)***	.06 (.01)***
Demographic Characteristics					
Education	.09 (.005)***	.09 (.005)***	.11 (.007)***	.11 (.007)***	.11 (.007)***
Age	.02 (.001)***	.01 (.001)***	.02 (.001)***	.02 (.001)***	.02 (.001)***
Gender of Respondent	-.05 (.01)***	-.08 (.02)***			
Characteristics of Women Senators					
Seniority of Women Senators			-.02 (.01)**		
News Coverage				-.001 (.0006)*	
Interaction with Senator's Gender					
Gender of Respondent		.05 (.02)**			
Seniority of Woman Senator			.02 (.01)**		
News Coverage about Woman Senator				.001 (.0006)*	
Strength of Party Identification					.03 (.01)**
Intercept	-.91 (.05)***	-.89 (.05)***	-.97 (.06)***	-.97 (.06)***	-.96 (.06)***
<i>Variance Components</i>					
State-Level	.01 (.003)***	.01 (.003)***	.01 (.004)***	.01 (.003)***	.01 (.004)***
Individual-Level	.84 (.01)***	.84 (.01)***	.80 (.01)***	.80 (.01)***	.80 (.01)***
-2 x Log Likelihood	56674.69	56668.13	30250.14	30249.48	30247.69
N(respondents)/N(states)	21240/50	21240/50	11530/50	11530/50	11530/50

¹ Unstandardized coefficients, with standard errors in parentheses.

Note: The dependent variable is a political activity index composed of four activities: donating money, persuading others, joining a political organization, voting. Gender of the Senator is coded 2 for people living in states with two female senators, 1 for people living in states with one female senator, and 0 for people living in states with two male senators. Competitiveness of Senate Election is coded 1 for respondents living in states with a competitive senate election and 0 for respondents living in other states. Combined Seniority of Senators is the seniority (in years) of both senators. Knowledge of Senators' Political Profile is the number of questions correctly answered about both senators' political profile. Knowledge of Senators' Roll Call is the number of questions correctly answered about both senators' roll call record. Political interest ranges from "not at all" interested (1) to "very interested (3). Political sophistication ranges from 0 to 3. Strength of party ranges from Independent (0) to strong Republican or Democrat (3). Education is coded on a six-point scale ranging from no high school to graduate school. Age is coded in years. Gender of respondent is coded 1 for female and 0 for male. Seniority of Woman Senator is the number of terms served for women senators in each state. News Coverage of Woman Senator is the number of news articles mentioning women senators in each state.

*** p<.01 ** p<.05 * p<.10